

EXECUTIVE SUMMARY

Eloy Correctional Facilities Complex Gray Water Treatment System Recycled Water Individual Permit for Gray Water No. R-105946, Place ID 2019, LTF No. 82152

I. Introduction:

In compliance with the provisions of Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Article 7 and A. A. C. Title 18, Chapter 11, Article 3 and amendments thereto, and the conditions set forth in this permit, CoreCivic Inc. is hereby authorized to operate a gray water reuse program for the beneficial use of gray water in accordance with the limitations, monitoring requirements and other conditions set forth in this permit and in the rules sited above.

II. Reuse Site Location:

La Palma Correctional Center 5501 North La Palma Road Eloy, Arizona

III. Regulatory Status:

The Arizona Department of Environmental Quality (ADEQ) issued an Individual Gray Water Permit (No. R105946) for this facility on December 3, 2008. The renewal of the permit was received by ADEQ on November 14, 2013 and the permit was reissued on September 19, 2014. The application for this permit reissuance was received on April 22, 2020.

IV. Reuse Site Description:

CoreCivic, Inc. is authorized to operate a gray water treatment and reuse program which collects gray water from La Palma Correctional Center at the Eloy Correctional Facilities Complex. The Eloy Correctional Facilities Complex used to operate gray water reuse program at three correctional facilities: Red Rock Correctional Center, Saguaro Correctional Center and La Palma Correctional Center. The permitted has ceased the gray water reuse program at Red Rock Correctional Center and Saguaro Correctional Center and only operating the gray water system at La Palma Correctional Center.

La Palma Correctional Center housing unit at the correctional facilities has installed a separate gray water collection and treatment system. The system collects housing unit shower water only and then treats the collected water with primary and secondary plastic media filtration and tablet chlorination disinfection. The plastic media filtration and tablet chlorination units are located within a tank system buried below grade.

The treatment system also includes an adjustable automatic recirculation timer. The timer is used to control the level of treated gray water recirculation back through the filtration and chlorination units. The timer allows the system operator to provide adjustable levels of filtration and chlorination treatment to the gray water.

A pumping system conveys the treated gray water from the buried tank system into a reuse water piping system to toilet flushing facilities at each housing unit. Excess gray water not



used for toilet flushing will be directed via gravity sewer to the Eloy Detention Center Wastewater Treatment Plant (Aquifer Protection Permit No. P-102749). The system is a closed-loop system with no gray water or associated wastes allowed to be discharged to the local area soils. Gray water will not be used for any on-site irrigation.

At an average use rate of 30 gallons per day per bed, 3,000 beds at La Palma Correctional Center, the gray water use is 90,000 gallons of gray water use per day.

The gray water system includes a tank system buried just below grade. The tanks are constructed from 5 mm Novapol polyethylene. Each gray water storage tank has a pump which is equipped with a discharge sample tap. The La Palma Correctional Center consists of twenty-seven (27) storage tanks with each tank with 6,600-gallon capacity. In accordance with Section 3.1 of the permit, gray water quality samples shall be collected from the discharge sample taps.

V. Monitoring And Reporting Requirements

The gray water storage tank has a pump which is equipped with a discharge sample tap. Gray water samples shall be collected on a quarterly basis from the discharge sample taps and shall be analyzed for fecal coliform. The limits for fecal coliform are equivalent to the limits for Class A reclaimed water as described in A.A.C. R18-11-304.

If any of the treatment units exceed the permit limit for fecal coliform during the quarter, the sampling frequency shall be increased to monthly for a period of one year. If the unit does not exceed the limit for 12 consecutive months, it may be restored to quarterly sampling. If the unit exceeds the limit a second time, monthly sampling will be required for that unit for the remaining life of the permit.